DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-008027

Address: 333 Burma Road **Date Inspected:** 01-Aug-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: LIU FAWEN **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component: OBG & TOWER COMPONENT**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance(QA) Inspector, Subhasis Bera was present during the times noted above for observations relative to the work being performed.

In process Inspection

BAY #7

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) in the 2F position of the OBG Side Plate to stiffener weld No. SP-3012-001-066&067. The welders are identified as #222396 & #048625. ZPMC QC is identified as Mr.Shen JianGuo .The welding variables recorded by QC appear to comply with WPS- B – T-2132.

Bay #6

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) in the 2G position of the Tower Strut assembly weld No. WD1-A305-77M-1-10B . Welders are identified as #066481& #066456. ZPMC QC is identified as Mr. Mr. Shu Zhen Youg. The welding variables recorded by QC appear to comply with WPS-B – T-2212-Tc-U5b.

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Shielded Metal Arc Welding (SMAW) in the 2G position of the Tower Strut assembly weld No. WD1-A305-53M-2-7B. Welder is identified as #037743. ZPMC QC is identified as Mr.Shi Yu. The welding variables recorded by QC appear to comply with WPS- B – T-3212-Tc-U5b-1.

Shielded Metal Arc Welding (SMAW) in the 2F position of the Tower Strut assembly weld No. WD1-A305-65M-3-24/25 . Welder is identified as #066459. ZPMC QC is identified as Mr.Shu Zhen Youg. The welding variables recorded by QC appear to comply with WPS- B – T-2112.

Shielded Metal Arc Welding (SMAW) in the 2F position of the Tower Strut assembly weld No. WD1-A305-53M-2-50/51 . Welder is identified as #037780. ZPMC QC is identified as Mr.Shu Zhen Youg. The welding variables recorded by QC appear to comply with WPS-B – T-2112.

Bay# 5

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) in the 2F position of the OBG Bike Path assembly weld No. BK-001-028-51&52. The welders are identified as #217185 & #204342. ZPMC QC is identified as Mr.Wang Liang .The welding variables recorded by QC appear to comply with WPS- B – T-2132-3.

Flux Core Arc Welding (FCAW) in the 3F position of the OBG Bike Path assembly weld No. BK-001-028-22&23. The welders are identified as #217185 & #204342. ZPMC QC is identified as Mr.Wang Liang .The welding variables recorded by QC appear to comply with WPS- B – T-2133.

Ultrasonic Testing (UT)

This QA Inspector performed Ultrasonic testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as OBG Cross Beam Splice weld.

The Weld Designations are as follow

CB202C-011-001

CB202C-011-002

CB202C-011-003

CB202C-011-004

Magnetic Particle Testing(MT)

This Quality Assurance Inspector (QA) performed 15% verification Magnetic Particle Testing (MT) for Cross Beam Splice weld and Bike Path Assembly weld at Bay #5. This QA inspector generated a (MT) report for this date. This weld was previously tested and accepted by ZPMC QC MT technicians.

The Weld Designations are as follow

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BK-001-019-037,035,042, 065,064

BK-001-020-037,035,042,061,044

BK-001-021-037,061,065,064,044

BK-001-022-037,035,065,064,044

BK-001-023-042,061,065,064,044

BK-001-024-037,035,042,061,065

This Quality Assurance Inspector (QA) performed 15% verification Magnetic Particle Testing (MT) for Cross Beam Splice weld at Bay #6. This QA inspector generated a (MT) report for this date. This weld was previously tested and accepted by ZPMC QC MT technicians.

The Weld Designation is as follow

CB202D-009-002

This Quality Assurance Inspector (QA) performed 15% verification Magnetic Particle Testing (MT) for stiffeners weld of Tower Diaphragm at Bay #6. This QA inspector generated a (MT) report for this date. This weld was previously tested and accepted by ZPMC QC MT technicians.

The Weld Designation is as follow

SSD1-DP-SA4-7B/B-4,6,12,16,21,24

Green Tagging

This QA inspector performed Visual Inspection for Bottom Plate which was previously accepted by ZPMC Quality Control personnel and ABF QA personnel.

The member is identified as

Bottom Plate No. Green Tagging No.

BP-3020A 009398

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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Inspected By: Bera, Subhasis Quality Assurance Inspector **Reviewed By:** Prue,Erik QA Reviewer